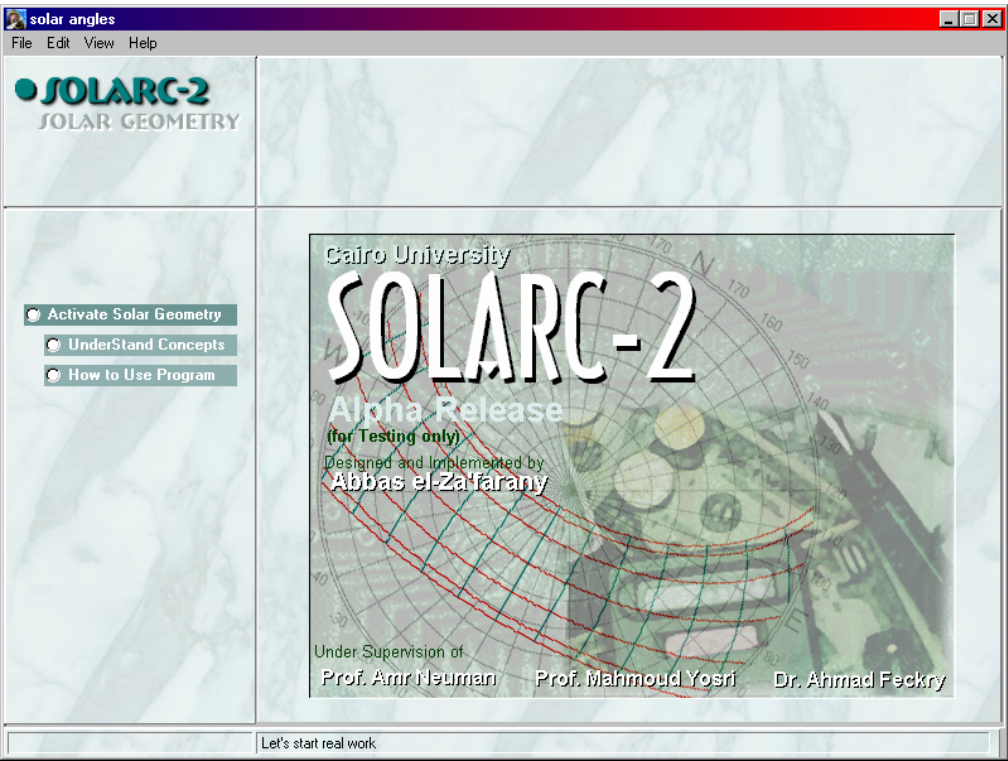


- برنامج حساب الاشعاع الشمسى Solarc -2/Solar Geometry

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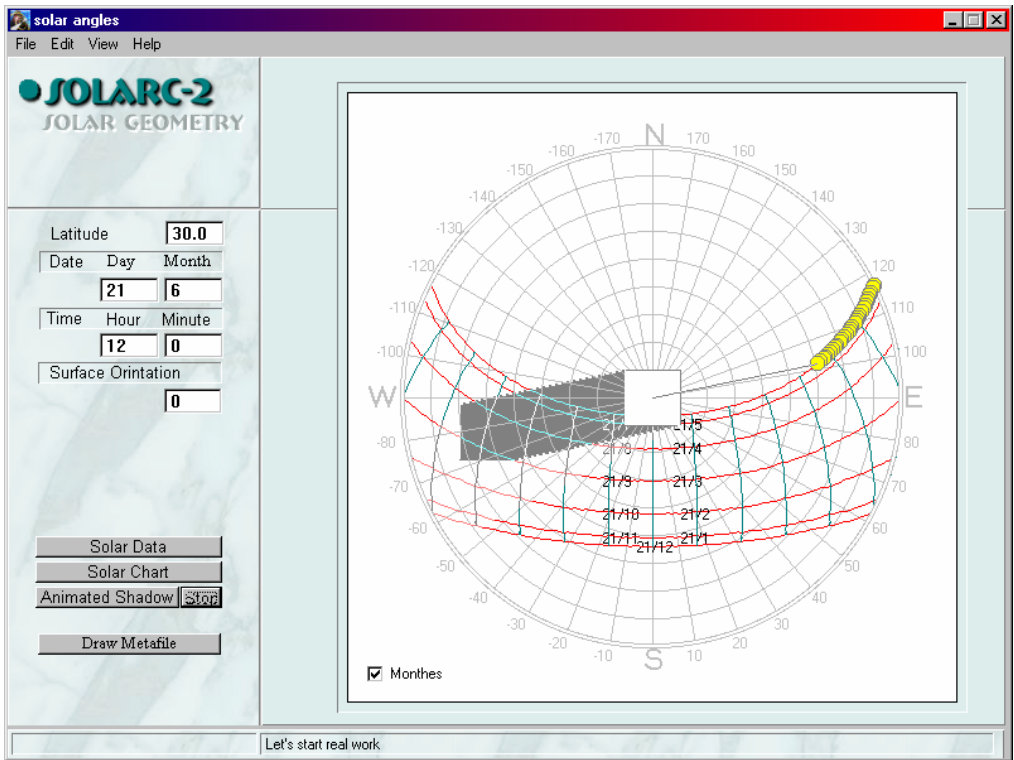
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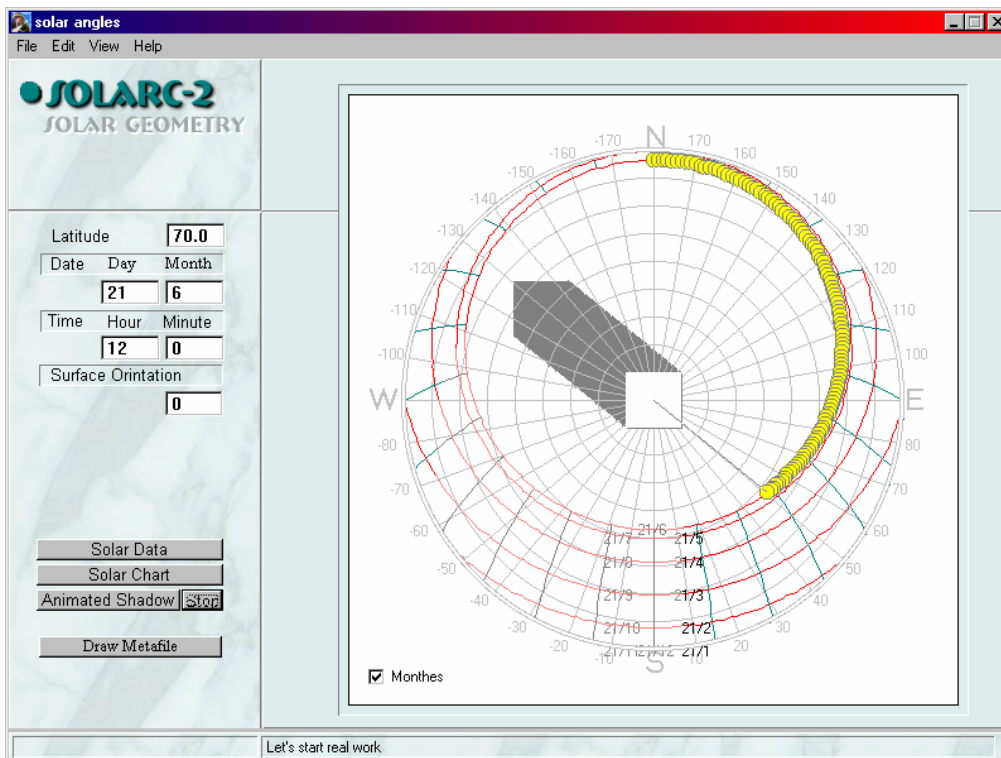
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$$\left(\frac{1}{r} \right) \times \frac{1}{r} = \frac{1}{r^2} = \frac{1}{(IA) \ln \cos \theta} = dI/d\theta$$

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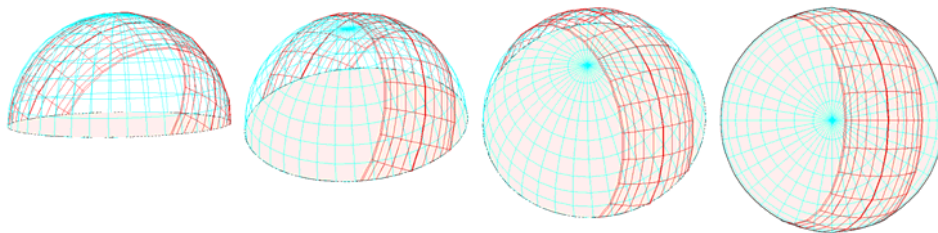
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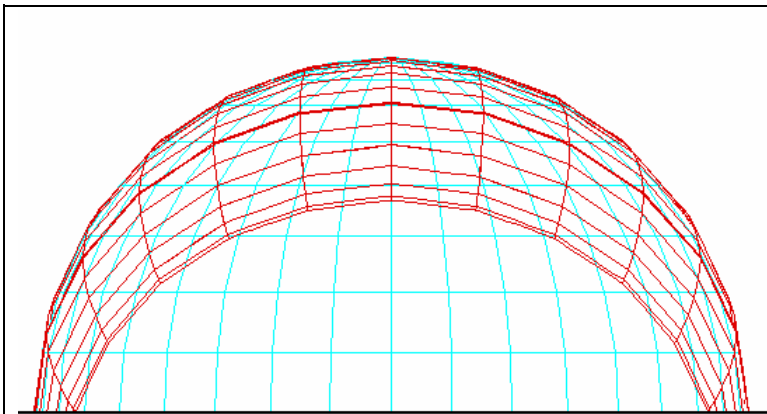
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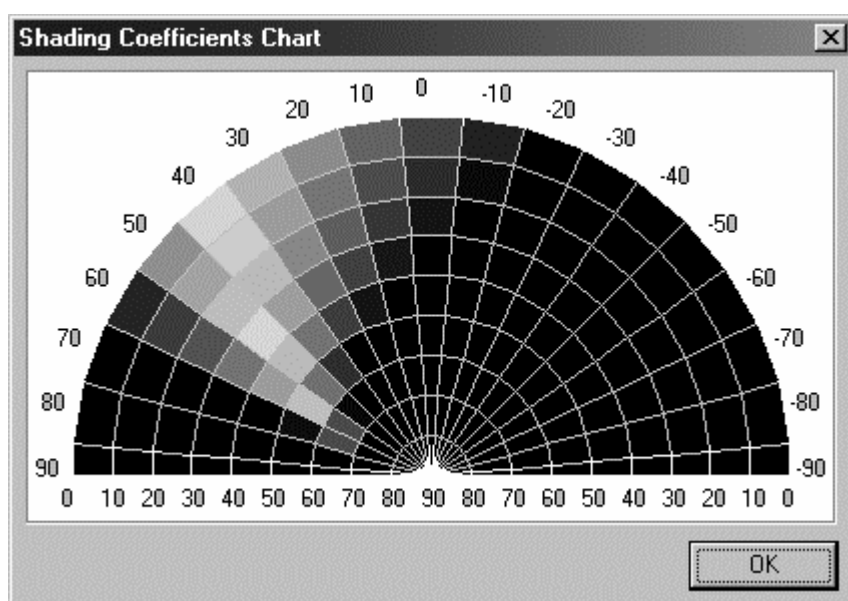
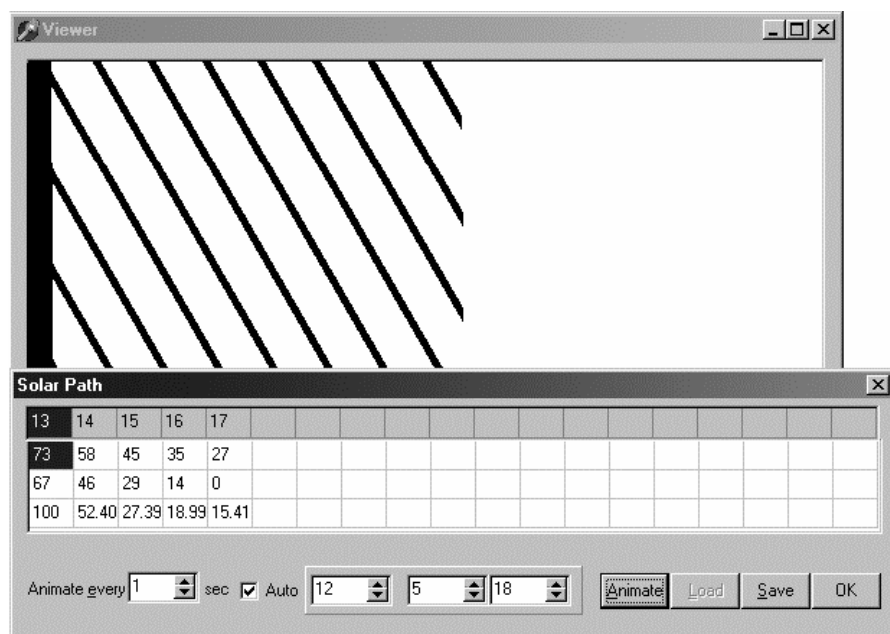


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Energy Gain												
	1	2	3	4	5	6	7	8	9	10	11	12
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	149.99	65.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61.57	144.47	166.03
9	460.02	385.28	186.37	3.23	0.00	0.00	0.00	3.06	174.77	366.33	448.74	467.41
10	343.72	279.22	172.18	38.87	0.00	0.00	0.00	36.97	162.48	267.31	336.73	364.58
11	164.02	97.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	93.48	160.97	180.52
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.24
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sum	1118	828	359	42	0	0	0	40	337	789	1091	1182

winter Solar Gain Summer Solar Gain Solar Gain Index

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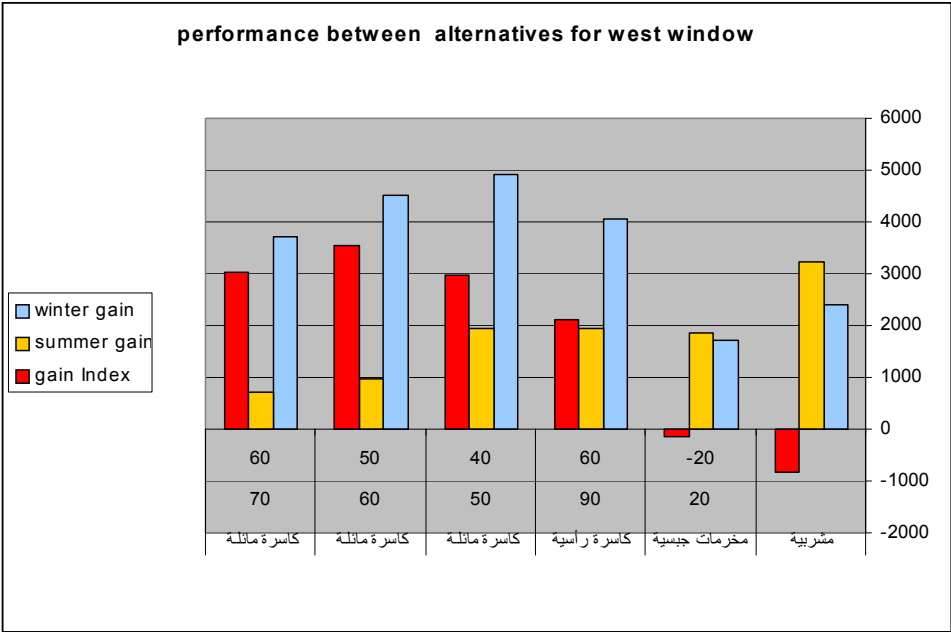
أولاً:- اختيار القيم المثلى لكل فكرة

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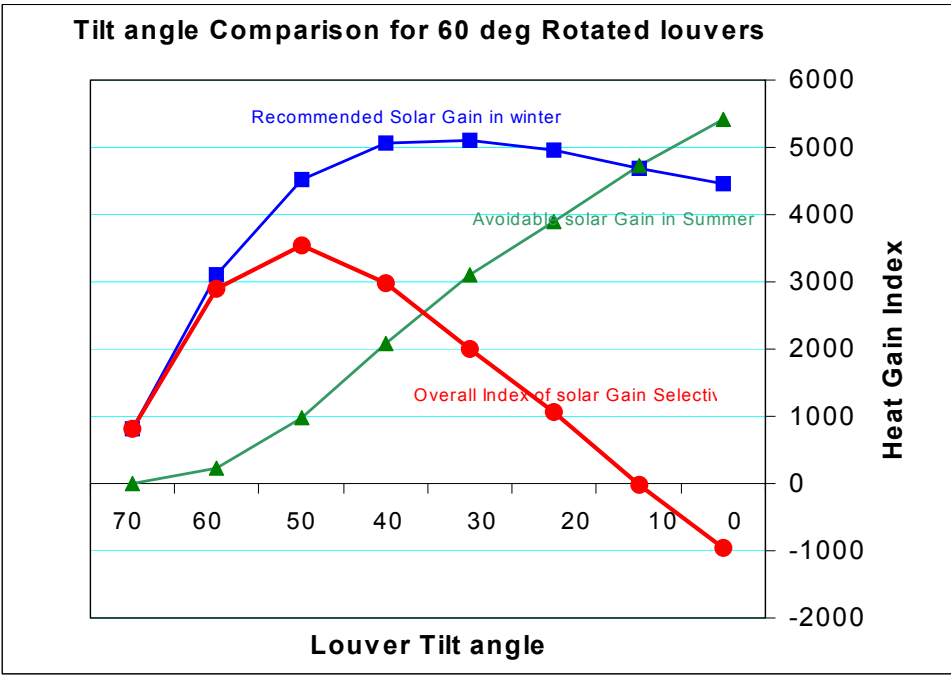
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ثانياً:- المقارنة بين الأفكار الرئيسية

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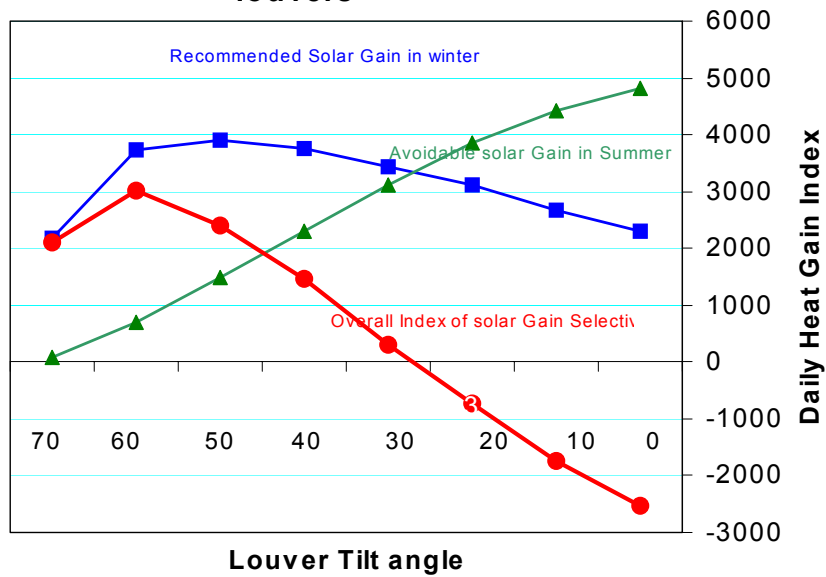


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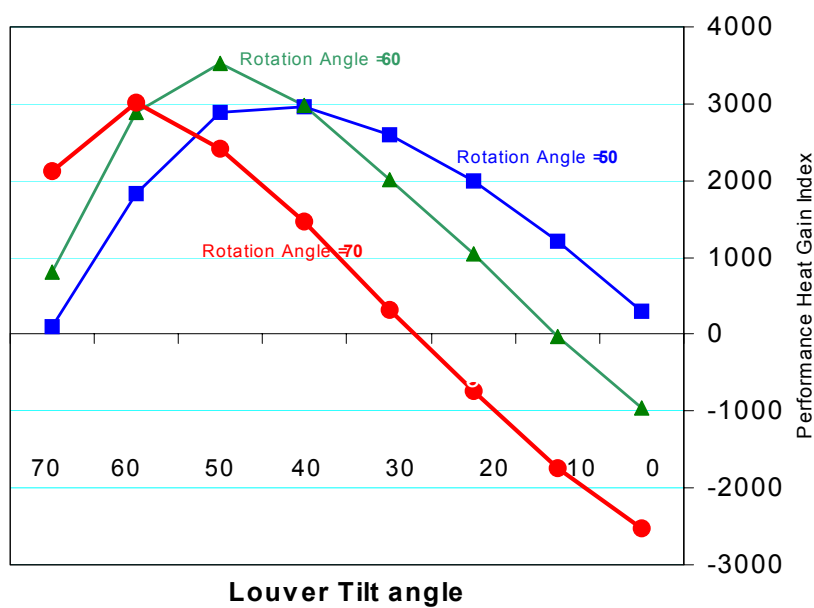


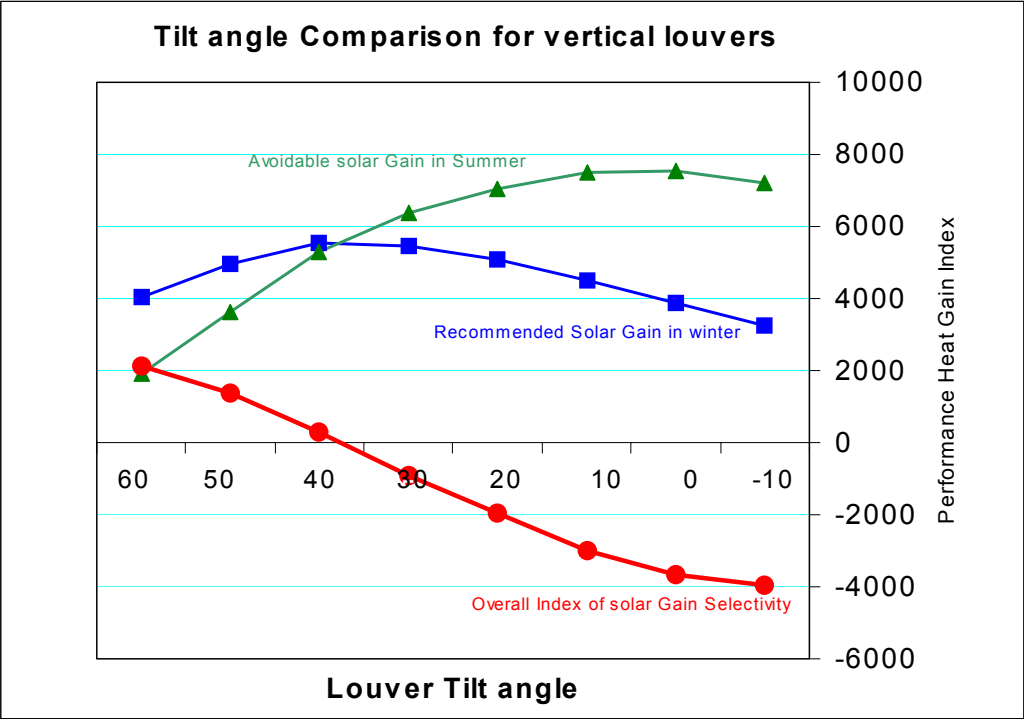
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Tilt angle Comparison for 70 deg Rotated louvers



Tilt angle Comparison for different Rotatetion Angles





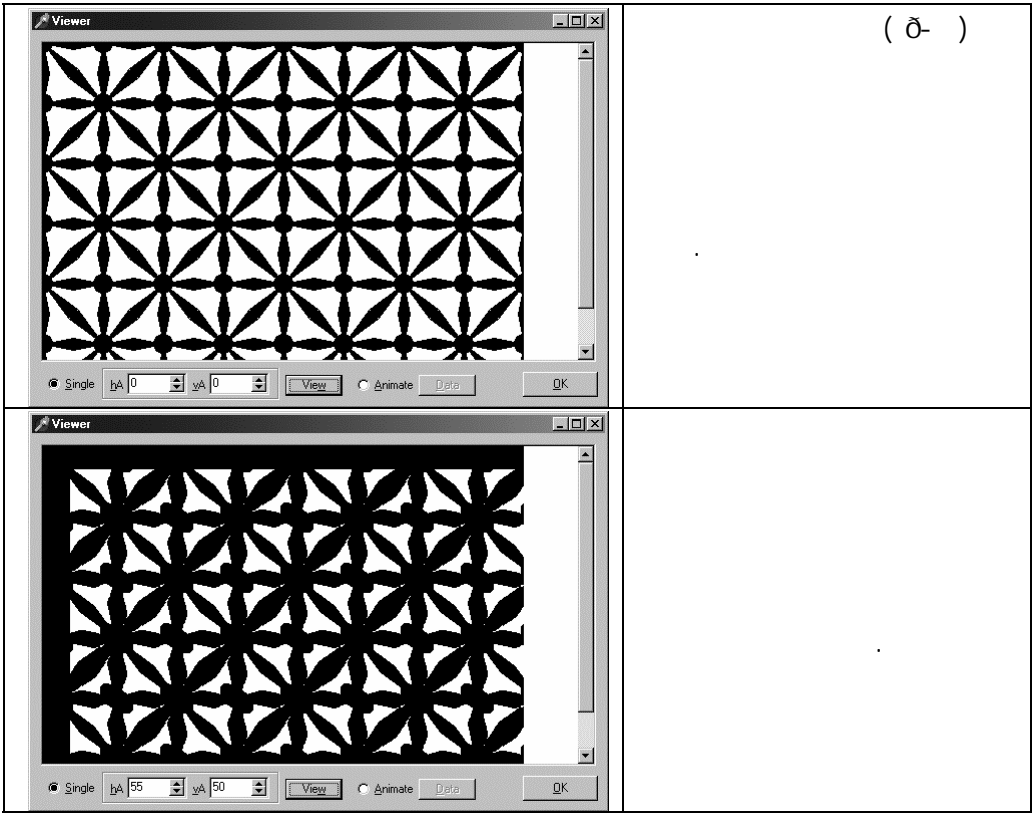
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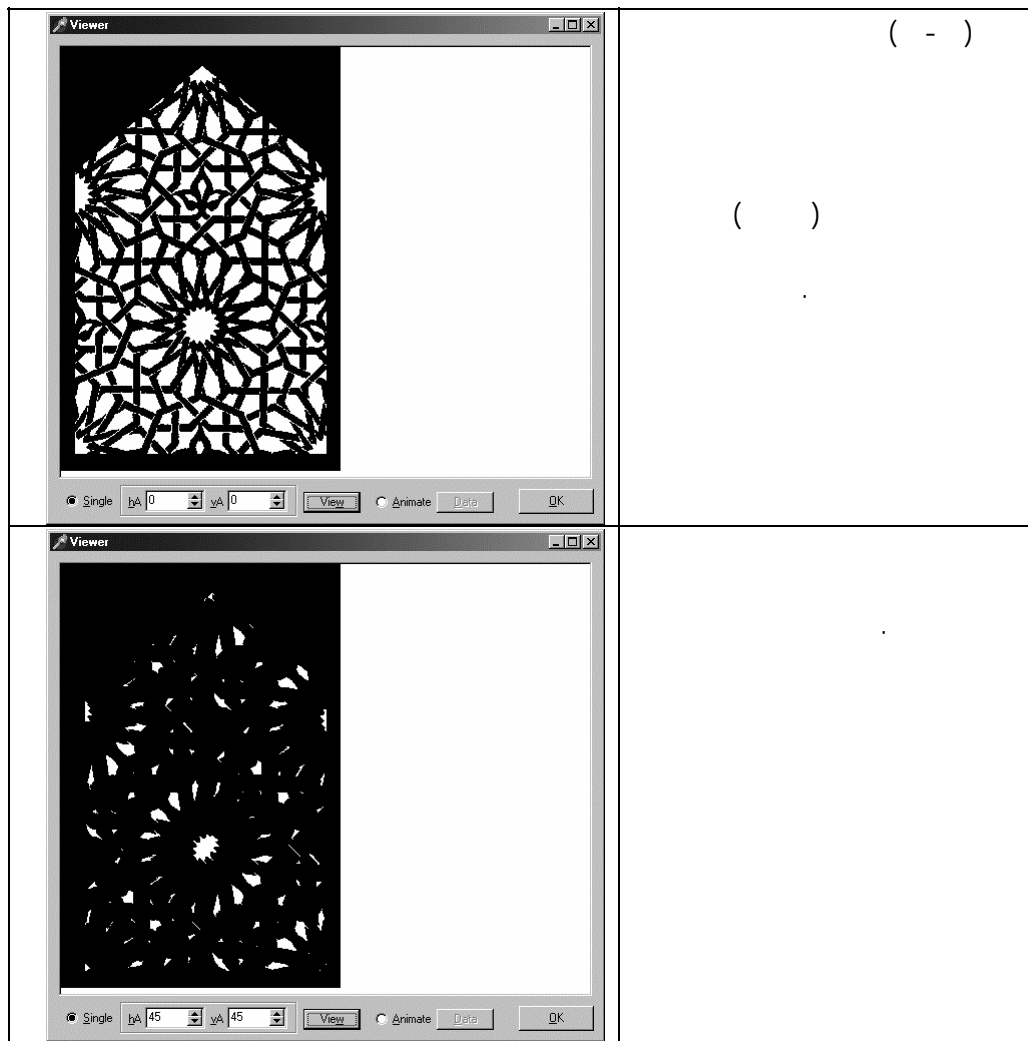
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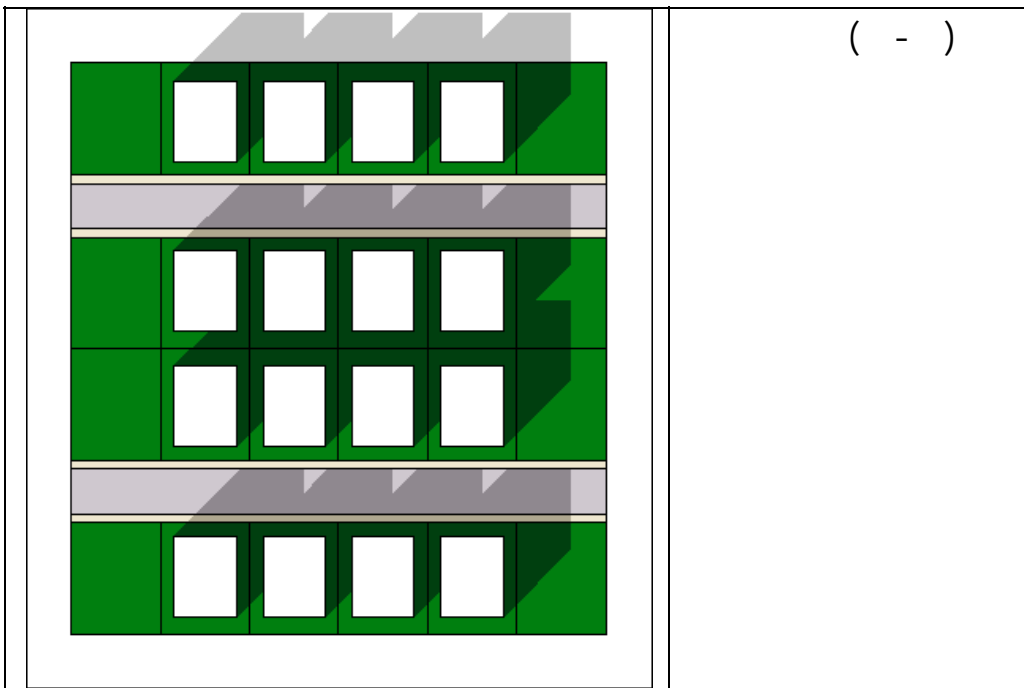
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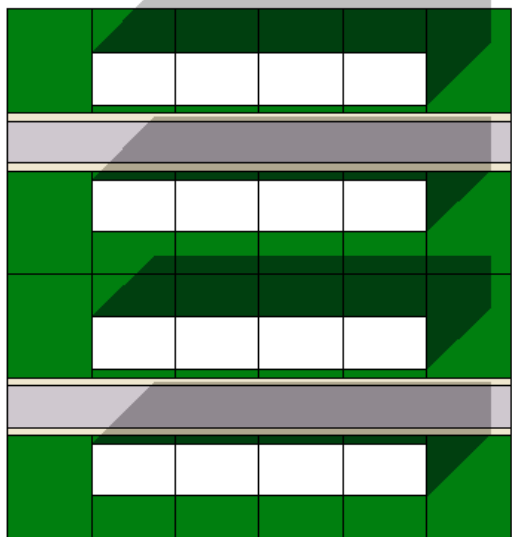
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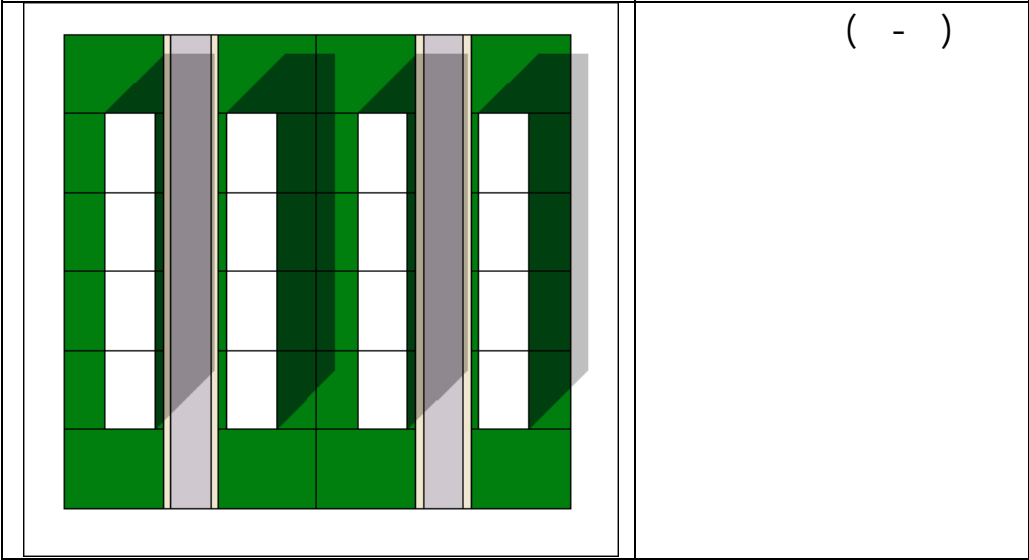
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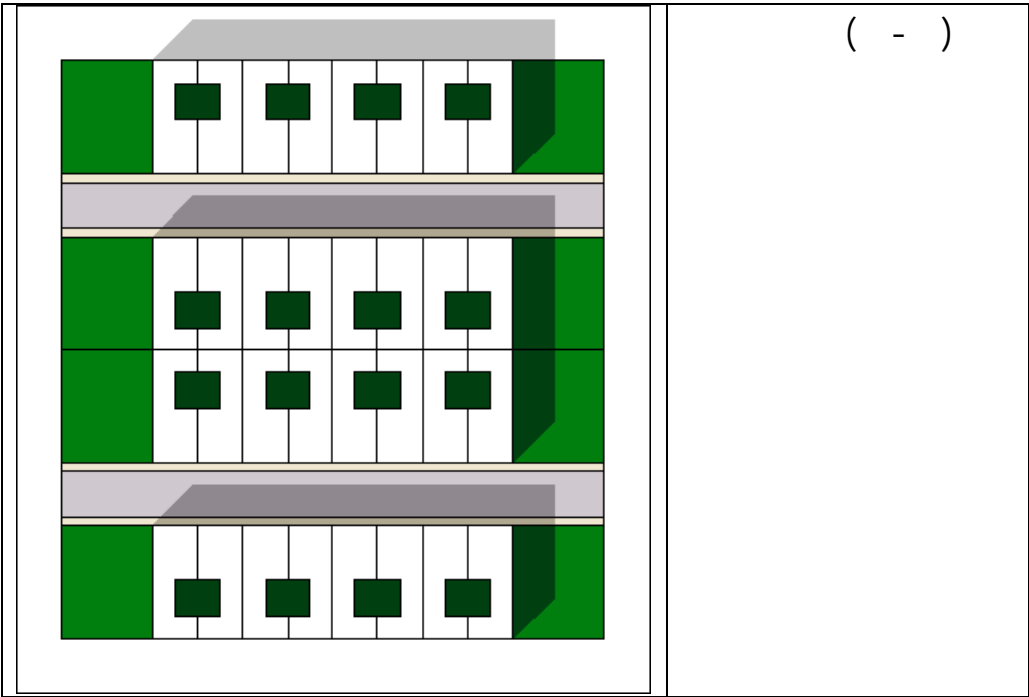
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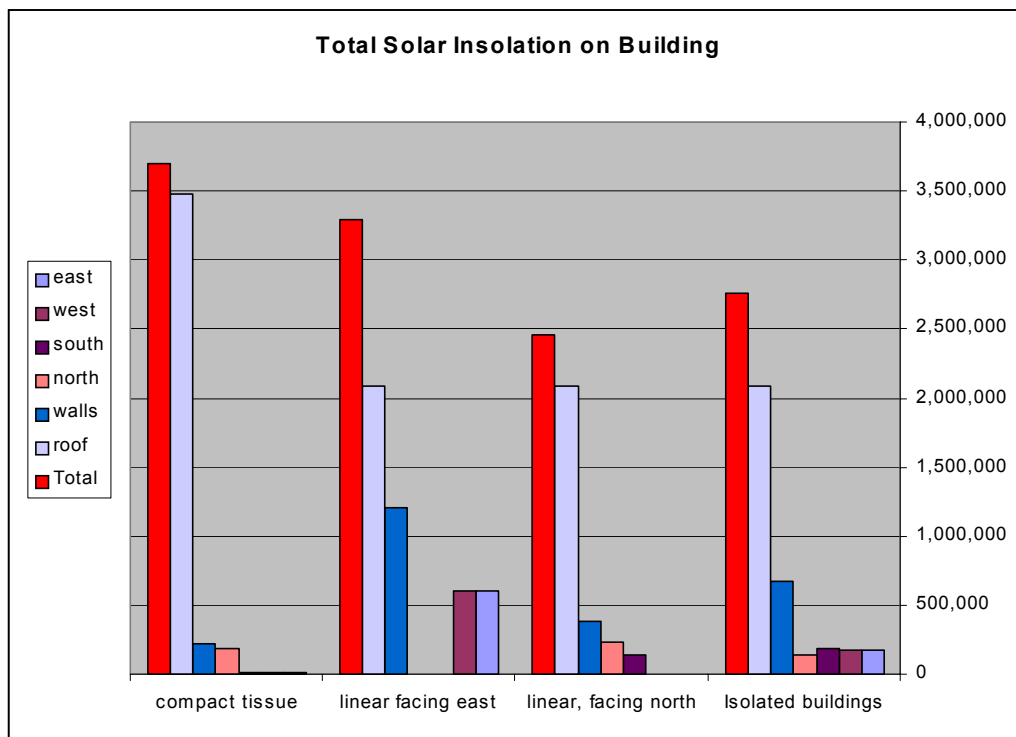
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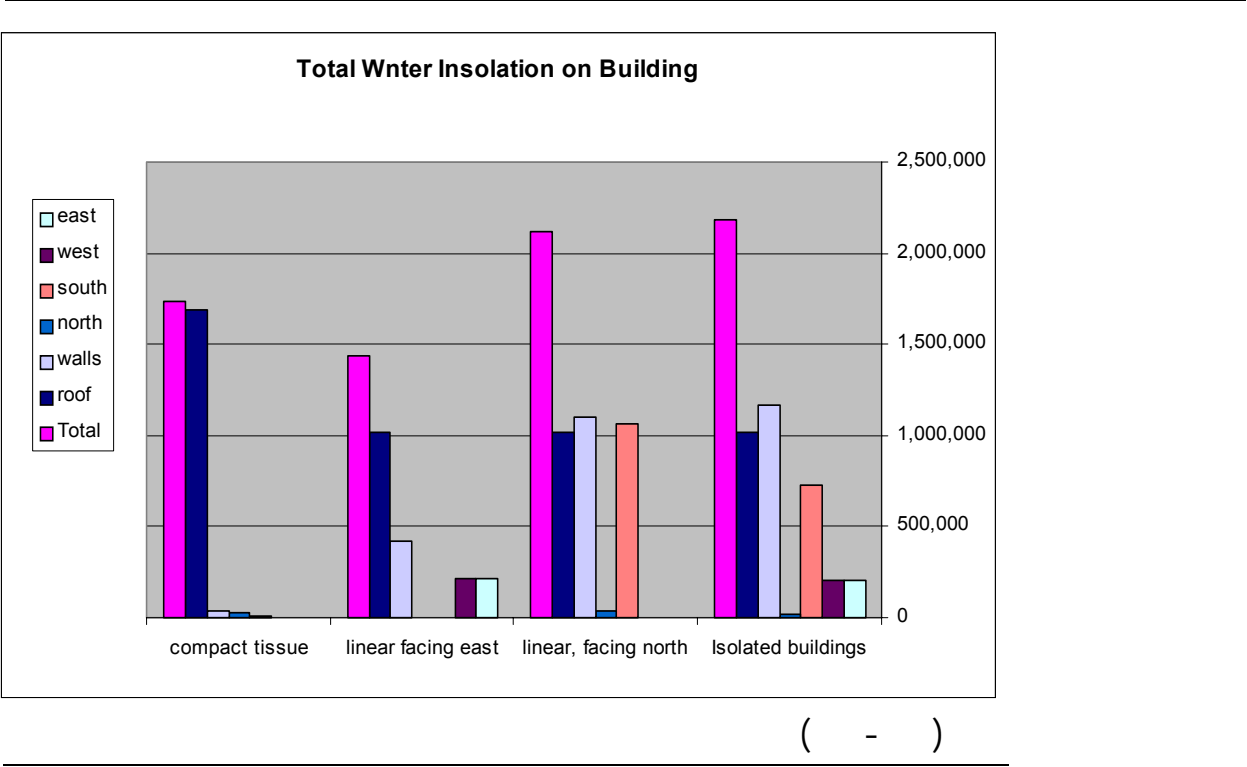
time	diffusd rduation		east					
			270.0					
	fh	fv	g	d/m	df	d	ff	f
6.0	0	0.0		0.0	0.0	0.0	0.6	0.0
7.0	0	0.0	0	0.0	0.0	0.0	0.6	0.0
8.0	34	17.0	495	478.0	23.3	30077.8	0.6	2754.0
9.0	47	23.5	564	540.5	31.8	46469.7	0.6	3807.0
10.0	53	26.5	449	422.5	45.4	51765.4	0.6	4293.0
11.0	55	27.5	255	227.5	70.1	43062.6	0.6	4455.0
12.0	55	27.5	28	0.5	0.0	0.0	0.6	4455.0
13.0	55	27.5	27	-0.5	0.0	0.0	0.6	4455.0
14.0	53	26.5	26	-0.5	0.0	0.0	0.6	4293.0
15.0	47	23.5	24	0.5	0.0	0.0	0.6	3807.0
16.0	34	17.0	17	0.0	0.0	0.0	0.6	2754.0
17.0	0	0.0	0	0.0	0.0	0.0	0.6	0.0
18.0	0	0.0		0.0	0.0	0.0	0.6	0.0
						171,375.6		35,073.0
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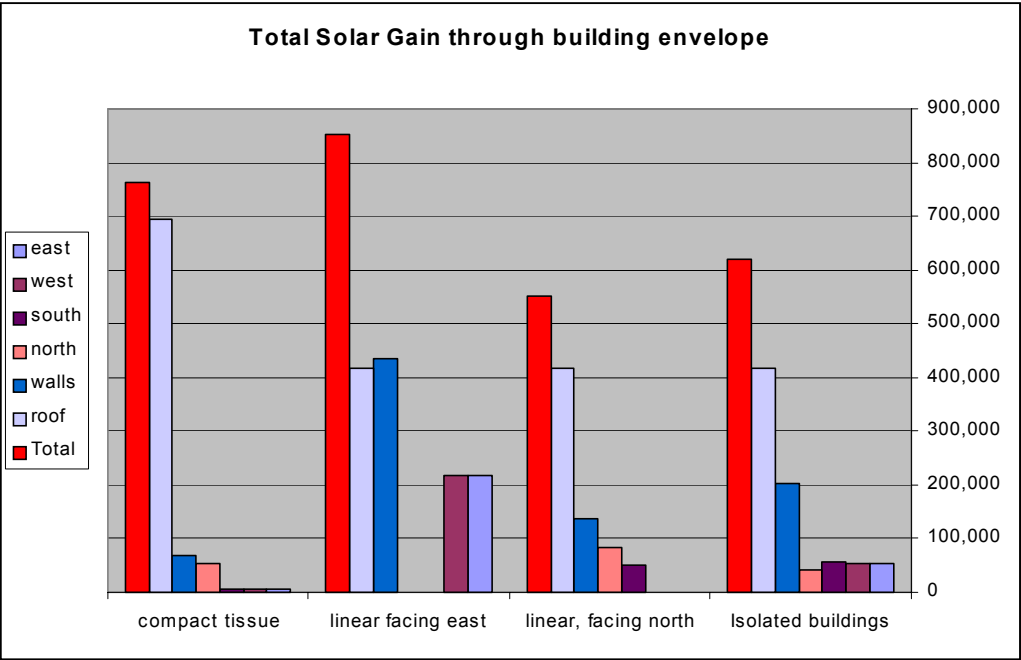
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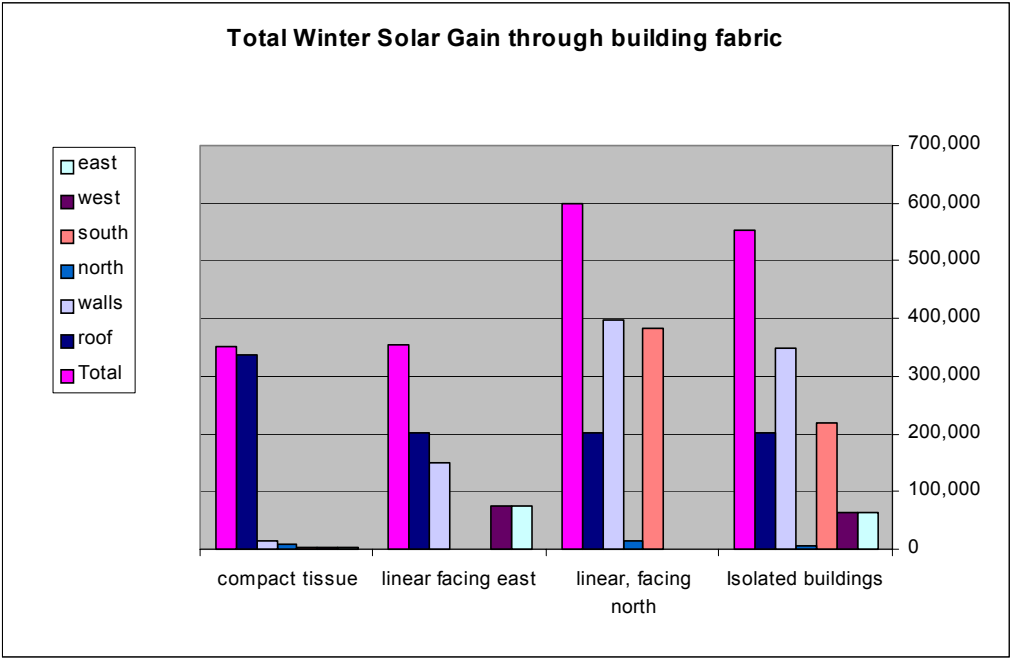
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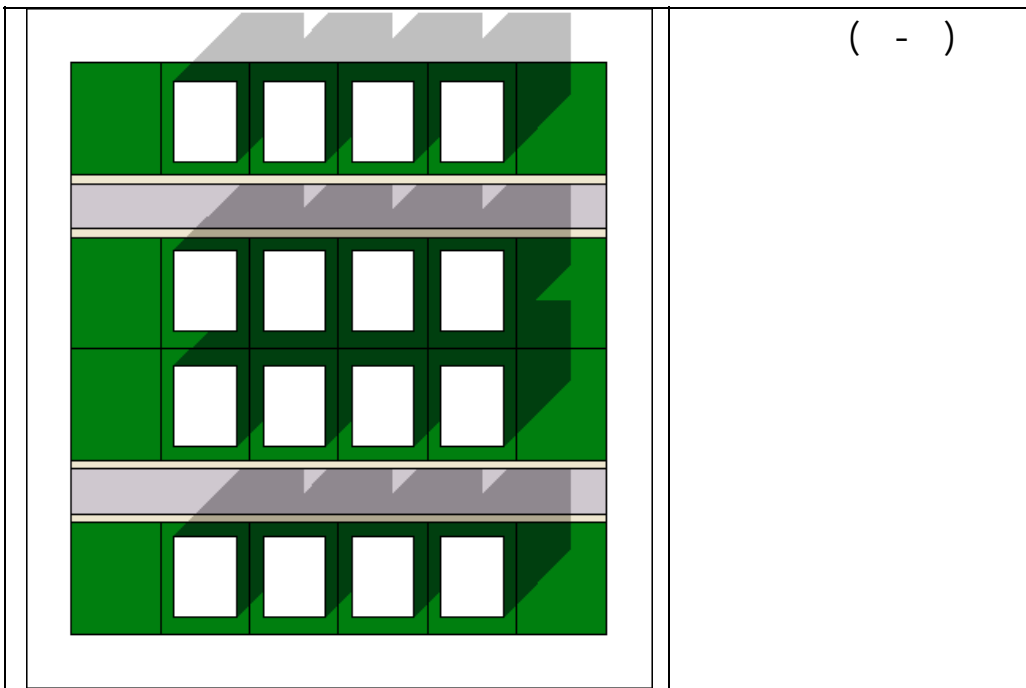
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ب- الوضع الحالي لأدوات التصميم المناخي الرقمية:-

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SolArc-2, Solar Geometry -

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